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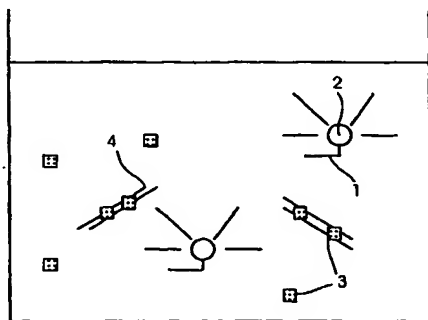
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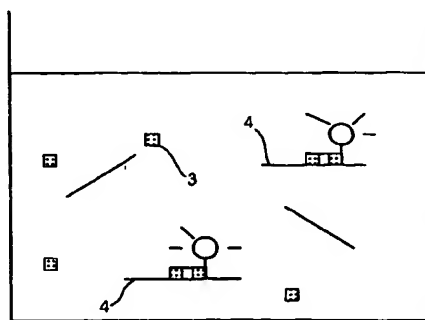
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- Published:**
- with international search report
 - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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(54) Title: DETECTION SYSTEM



A



B

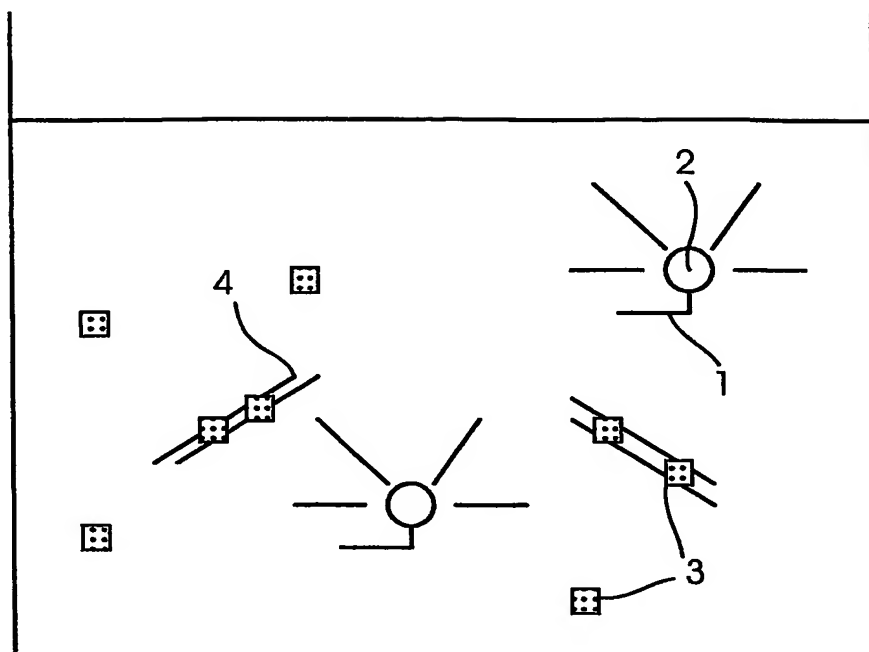
(57) Abstract: A method for detecting the presence of a target nucleic acid sequence in a sample, said method comprising: (a) adding to a sample suspected of containing said target nucleic acid sequence, a fluorescently labelled probe specific for said target sequence, and DNA duplex binding agent which can absorb fluorescent energy from the fluorescent label on the probe but which does not emit visible light, (b) subjecting the thus formed mixture to an amplification reaction in which target nucleic acid is amplified, (c) subjecting said sample to conditions under which the said probe hybridises to the target sequence, and (d) monitoring fluorescence from said sample. This method can be used for example to monitor amplification reactions such as PCR reactions, such that the amount of target sequence present in the sample may be determined. Additionally or alternatively, it may be used to generate duplex destabilisation data such as melt hysteresis information for amplification monitoring or for detection and quantification of polymorphisms or allelic variation, and so is useful in genetic diagnosis.

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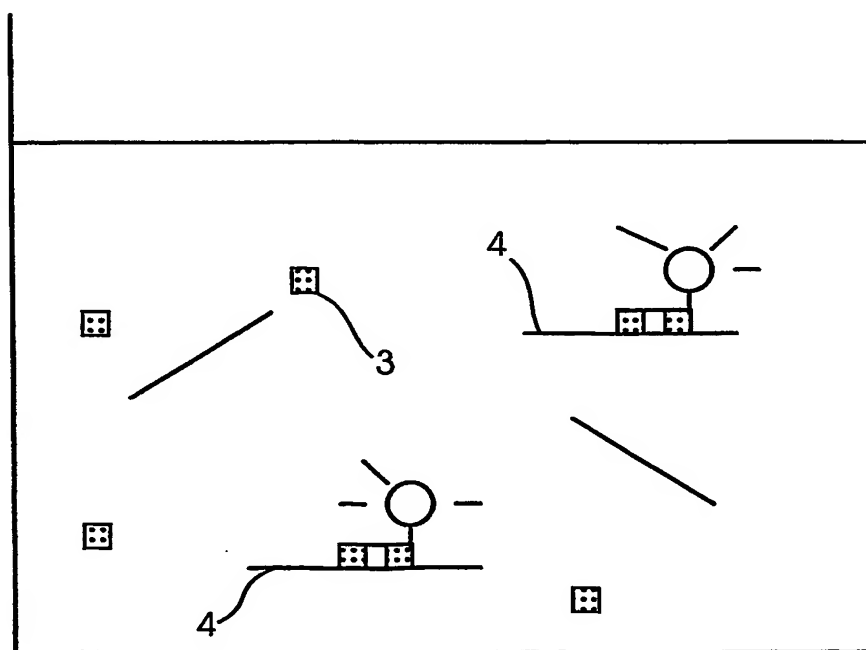
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



A



B

Fig. 1

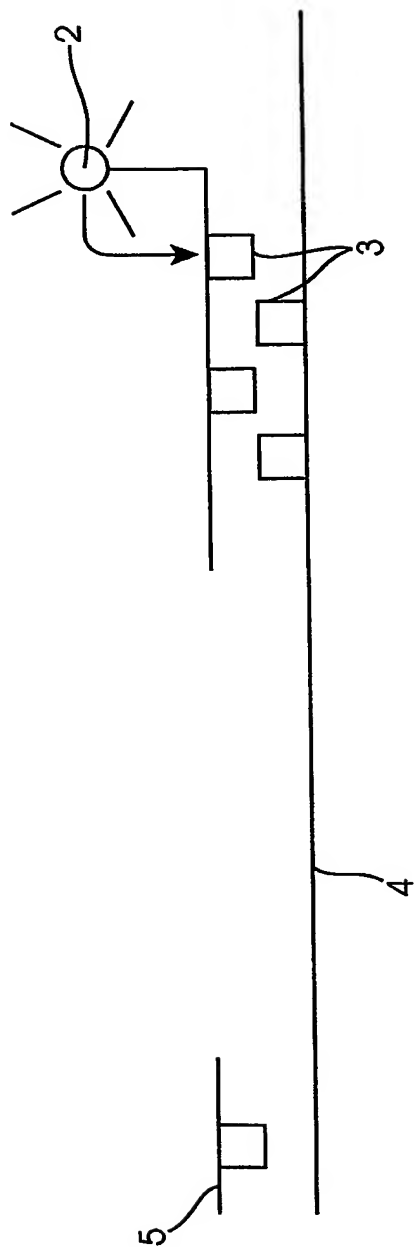


Fig. 2A

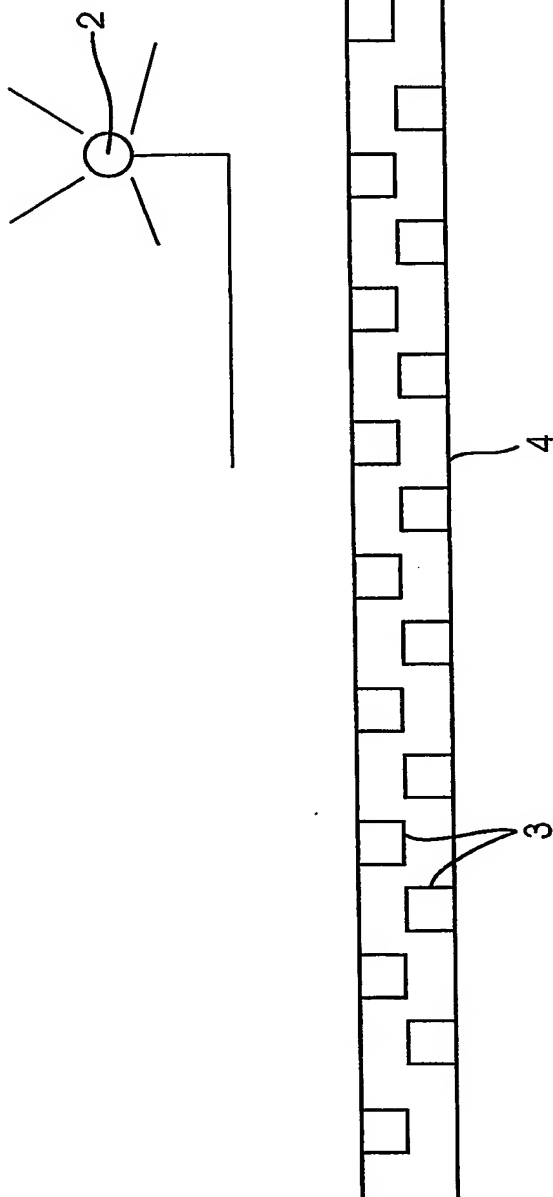


Fig. 2B

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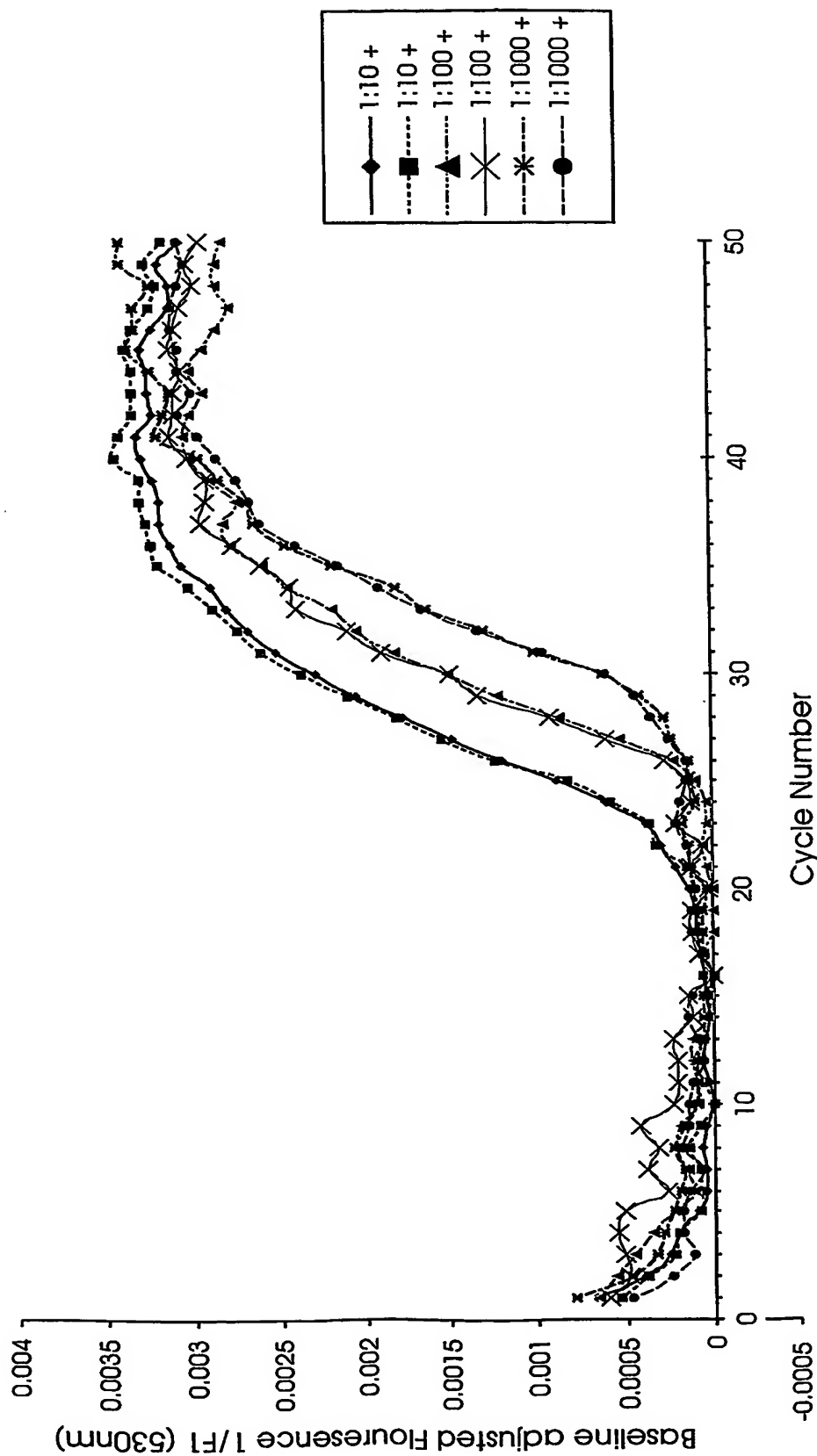


Fig. 3

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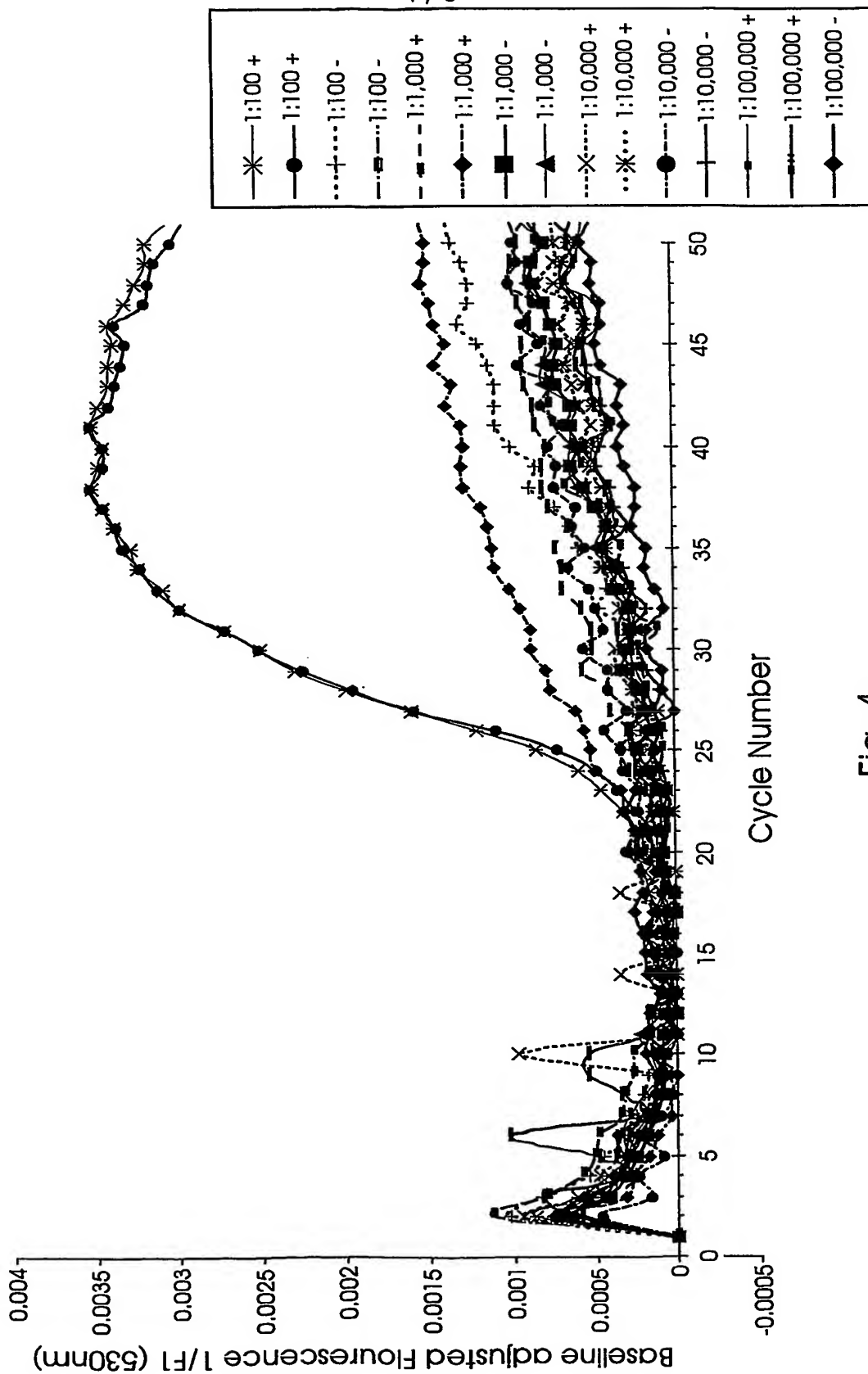


Fig. 4

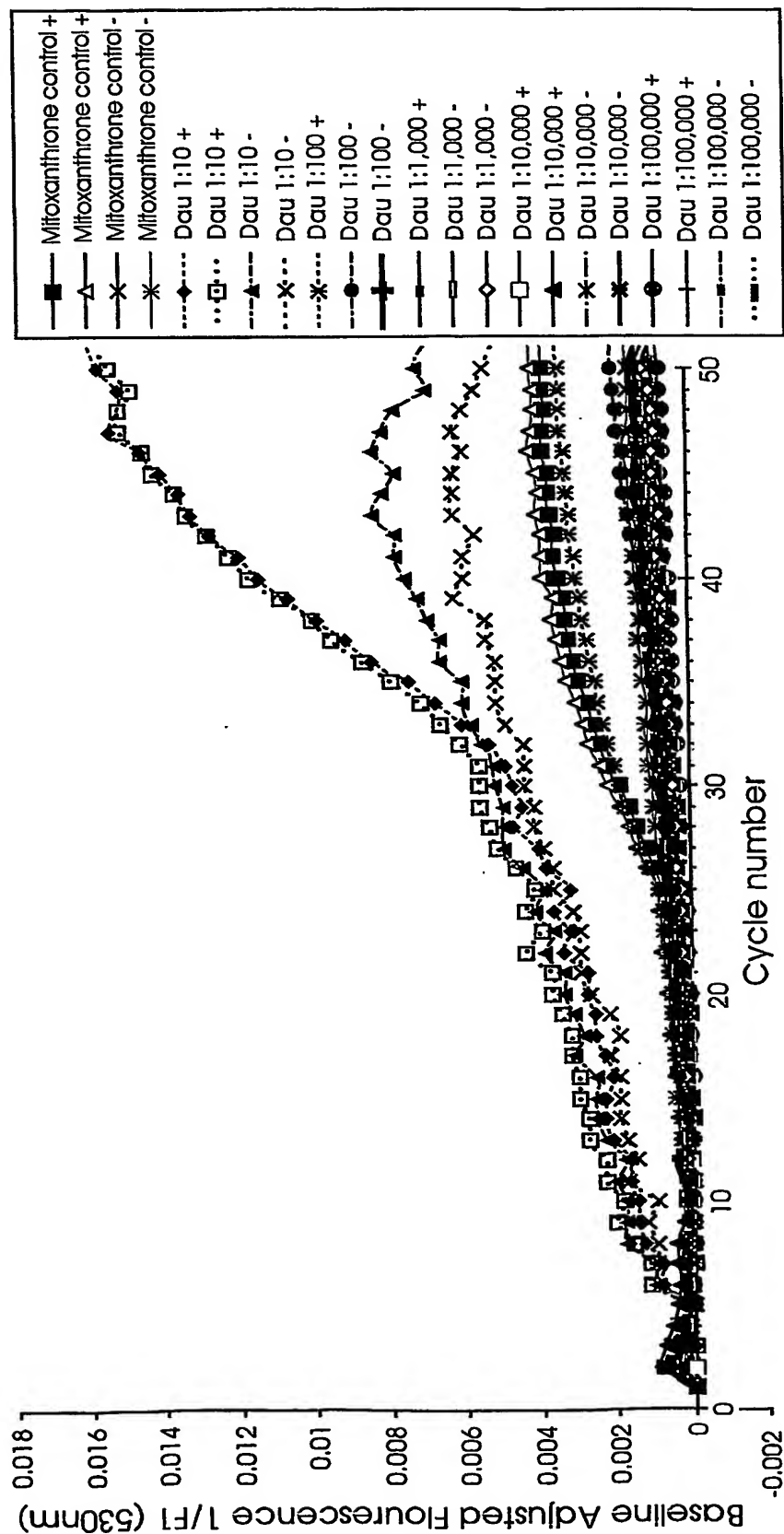
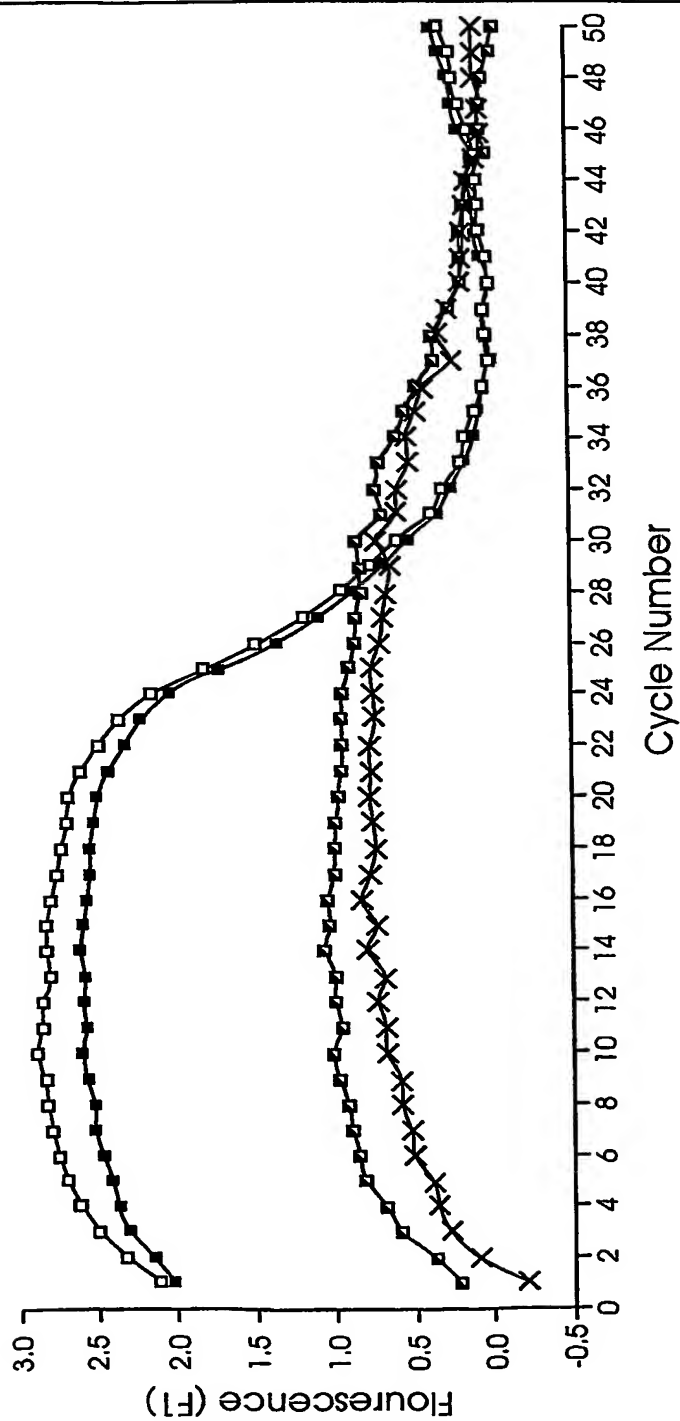


Fig. 5



1	+	13	1:100 +
2	+	14	1:100 +
3	-	15	1:100 -
4	-	16	1:100 -
5	Neat +	17	1:1,000 +
6	Neat +	18	1:1,000 +
7	Neat -	19	1:1,000 -
8	Neat -	20	1:1,000 -
9	1:10 +	21	1:10,000 +
10	1:10 +	22	1:10,000 +
11	1:10 -	23	1:10,000 -
12	1:10 -	24	1:10,000 -
		25	1:100,000 +
		26	1:100,000 +
		27	1:100,000 -
		28	1:100,000 -

Baseline Adjustment: Arithmetic

Fig. 6

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 03/04412

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, EMBASE, CHEM ABS Data, BIOSIS, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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